

WHAT IS CLAIMED IS:

1. A liquid discharge cartridge comprising:
a recording head provided with a liquid discharge
port for discharging liquid;

5 at least one liquid storing chamber for storing
liquid to be supplied to said recording head;

a gas-liquid separation member arranged for an
opening portion of said liquid storing chamber; and

an atmosphere communication port for enabling
10 the inside of said liquid storing chamber to be
communicated with the air outside through said gas-
liquid separation member, wherein

given the length of each of paths from said gas-
liquid separation member to said atmosphere
15 communication port as L_n , and the sectional area of
each path as S_n , the diffusion resistance R is

$$R = \sum (L_n / S_n)$$

Then, the coefficient K calculated on the basis
of the liquid evaporation rate not allowing component
20 contained in said liquid to be solidified around said
liquid discharge port, said diffusion resistance R ,
and the amount of liquid evaporation is

$$K = 10,000 \text{ (mg} \cdot \text{mm/mm}^2\text{)}$$

Given the total weight of liquid filled in said
25 liquid storing chamber as V , the following expression
is satisfied:

$$K / V < R < 2,000.$$

DSO
7-28-04